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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,761	12/31/2003	Paul T. Van Gompel	20,240	9121

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EXAMINER

CHAPMAN, GINGER T

ART UNIT PAPER NUMBER

3761

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/749,761

Applicant(s)

VAN GOMPEL ET AL.

Examiner

Ginger T. Chapman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 1/31/05; 5/27/05; 7/27/05; 8/16/05
- 4) ☒ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 May 2005 has been entered.

Drawings

The drawings were received on 26 January 2005. These drawings are acceptable.

Status of the Claims

In response to communications filed 20 May 2005, claims 1-46 are pending in the application.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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Claims 1-3, 5, 7, 9-13, 15, 16, 21, 24, 26-28, 30-32, 35, 37, 39, 41-43, 45 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Allen (US 5,037,416).

As depicted in figures 1 and 5, Allen discloses a disposable garment which includes: a liquid impermeable outer layer (16) which may be pleated (col. 4, line 48); an absorbent core (18) joined to the outer layer; and a liquid permeable elastic inner layer (12) having two or more layers of material (col. 6, lines 27-28; see also col. 11, line 58) and further having a perimeter (22, 24, 50) (column 2, lines 66-68) and a front piece (42) and a back piece (44) which are elastic in the lateral direction (col. 7, lines 7-11, see also col. 6, lines 65-66,) and a crotch piece (46) which is elastic in the longitudinal direction (50) (col. 4, lines 19-24) wherein the crotch piece defines an opening (21) located in an internal position to the elastic inner layer perimeter (col. 12, lines 26-32), and the inner layer perimeter is bonded to the outer layer perimeter (col. 3, lines 36-38). The elastic inner layer may have zones of differing elastic properties (col. 13, line 41). The outer layer length is greater than the inner layer length in the longitudinal direction (col. 13, lines 14-15) and the inner and outer layers may be at least partially joined at their perimeters using ultrasonic, heat/pressure or adhesive in a variety of bonding patterns (col. 4, lines 51-52).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Stevens (US 4,756,709).

With regard to claim 4: Allen discloses a disposable garment having an elastically extensible inner layer but remains silent on the outer layer. As best depicted in figures 14 and 19, Stevens teaches a disposable garment wherein the outer cover (20) is resiliently stretchable in the longitudinal and lateral directions (71, 73) and laterally extensible (80, 82) thereby enhancing

the ability of the garment to conform to the anatomy of the wearer while the wearer engages in various activities and assumes various positions. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the garment of Allen with a stretchable extensible outer layer as taught by Stevens to produce a diaper providing an improved fit to the wearer.

Claims 17 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Stevens.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Stevens (US 4,756,709).

With regard to claim 17: Allen discloses a disposable garment having an elastically extensible inner layer but remains silent on the outer layer. As best depicted in figures 14 and 19, Stevens teaches a disposable garment wherein the outer cover (20) is resiliently stretchable in the longitudinal and lateral directions (71, 73) and laterally extensible (80, 82) thereby enhancing the ability of the garment to conform to the anatomy of the wearer while the wearer engages in various activities and assumes various positions. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the garment of Allen with a stretchable extensible outer layer as taught by Stevens to produce a diaper providing an improved fit to the wearer.

With regard to claims 18-20: see claims 1 and 4, *supra*.

Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen as applied to claim 31 above and further in view of Stevens.

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With regard to claims 33-34: see claims 1 and 4, *supra*.

Claims 14 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen as applied to claims 1 and 31 above, and further in view of Freeland et al. (US 5,269,775).

Allen discloses a disposable garment wherein the outer layer length is greater than the inner layer length in the longitudinal direction (col. 13, lines 14-15) thereby creating a void space for isolating waste materials between the layers. Allen fails teach an outer layer width that is greater than the lateral width of the inner layer. Freeland et al teach an elastic inner layer for a disposable garment wherein the garment outer layer has a greater width in both the lateral (col. 5, lines 2-4) and longitudinal (col. 4, lines 62-63) directions as recited in **claims 14, 29 and 44**, thereby providing a void space while additionally providing for shaping of the article and a snug inner layer fit while the garment is in use. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the garment of Allen with an outer layer having a greater width in the lateral direction as taught by Freeland to provide a more comfortable fit to the wearer while the garment is in use.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Stevens as applied to claim 17 above, and further in view of Freeland et al. (US 5,269,775).

Claim 29: see claims 14 and 44, *supra*.

Claims 6, 8, 36, 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen as applied to claims 1 and 31 above, and further in view of Kling (US 5,817,086).

Allen discloses the use of inner and outer layers having two or more layers or laminae of materials. Allen fails to address the use of impermeable inner layers or permeable outer layers in an absorbent garment such as a diaper. However, it is well known in the disposable absorbent garment art that “layer” when used in the singular can have the dual meaning of a single element or a plurality of elements.

Kling discloses the use of layers having a plurality of elements. In particular, Kling teaches an absorbent garment having an outer layer (5), an inner layer (2) with a large opening (17) and an absorbent assembly (4) positioned there between. The outer layer (5) consists of a laminate of materials such as, for example, polyethylene or polypropylene with a liquid permeable fiber fabric. The bottom layer can also consist of a laminate of thermoplastic layer and a fiber fabric, or a fiber fabric extrusion coated with a plastic film wherein the liquid permeable fiber fabric is placed outermost so that the diaper is given a textile look (col. 3, lines 60-68) providing a pleasing cloth-like appearance and feel to the user. Further, Kling teaches a liquid impermeable inner layer (2) having a large aperture or opening (17) for receiving urine and thus permitting the passage of liquid through the openings of the liquid impermeable inner layer (col. 8, lines 44-51) to the absorbent assembly while maintaining a dry feel to the surface of the layer in contact with the skin of the wearer and thus reducing skin irritation or “diaper rash”.

Therefore, it would be obvious to one of ordinary skill in the art at the time of invention to construct the apertured inner layer of Allen with a liquid impermeable material as taught by Kling to provide a dry skin-contacting surface to the wearer. It would further be obvious to one of ordinary skill in the art at the time of invention to utilize the outer layer of Allen with the

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permeable fiber fabric lamina placed outermost as taught by Kling to provide a pleasing cloth-like appearance for the user of the garment.

As best depicted in Figures 2 (17), 3 (117) and 4 (217), Kling further teaches a liquid impermeable inner layer (2) having a large opening (17, 117, 217) depicted as a length of about 75% of the total length of the disposable absorbent garment for receiving urine and permitting the passage of liquid through the opening of the inner layer (col. 8, lines 44-51) to the absorbent assembly while maintaining a dry feel to the surface of the inner layer in contact with the skin of the wearer thus reducing skin irritation or "diaper rash." In view of the teachings of Kling, it would be obvious to one of ordinary skill in the art at the time of invention to construct the inner layer and opening of Allen with a liquid impermeable material as taught by Kling to provide a dry skin-contacting surface to the wearer to reduce skin irritation.

Kling, in particular, depicts the size of the opening for receiving urine and permitting its passage therethrough as a length of about 75% of the total length of the disposable absorbent garment (figs. 2-4). Therefore, in view of this known teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the inner layer with an opening having a length of 10-80% of the total length of the garment, particularly since Kling teaches the general conditions of the opening, discovering optimum or workable size ranges involves only routine skill in the art.

Claims 22, 23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen in view of Stevens as applied to claim 17 above, and further in view of Kling.

Claims 22, 23 and 25: see discussion of Kling, *supra*.

Response to Arguments

Applicant's arguments filed 20 May 2005 have been fully considered but they are not persuasive.

I. Applicant submits that the instant claims require the elastic inner layer to include “a front piece, a back piece and a crotch piece” while the Allen reference discloses an elastic inner layer having “a front piece and a back piece elastic in the lateral direction and a crotch piece elastic in the longitudinal direction.” Applicant further submits that the elastic inner layer of Allen comprises portions of the diaper, not portions of the topsheet and therefore Allen does not teach a noncontinuous inner layer that is constructed of pieces attached together as claimed.

This argument is unpersuasive because:

(1) Allen discloses the claimed elastic inner layer except for the inner layer is of unitary construction while the instant claimed inner layer is constructed of pieces attached together. The claims are drawn to a product, which does not depend on its method of production, and in each case the end product is the same. Allen discloses the elastic inner layer elastically extensible in more than one direction as described in column 7, ll. 5-9. Allen therefore discloses the product and fulfills the claimed limitations. It has been held that constructing a formerly integral structure in various elements and putting them together involves only routine skill in the art and therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the elastic inner layer of Allen constructed in pieces attached together as claimed by Applicants. *Nerwin v. Erlichman*, 168 USPQ 177, 179.

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(2) Allen teaches at column 7, ll. 3-9 that the elastic inner layer can be elastic parallel to the longitudinal axis and all or a portion of the topsheet can be elastic in more than one direction and in a direction orthogonal to the longitudinal axis, i.e., elastic in the lateral direction. Allen therefore discloses the product and fulfills the claimed limitations.

(3) The front, back and crotch portions of the diaper of Allen comprise the elastic inner layer of Allen and thus include the elastic inner layer. Further the front, back and crotch portions of Allen, when the diaper is in use and worn about the body of the wearer, are the front, back and crotch portions of the instant application.

II. Applicant submits that the outer cover of Stevens would frustrate one of the purposes of Allen, i.e., allowing the core of Allen to fall away from the topsheet and create a void space.

This argument is not persuasive because:

As admitted in Applicant remarks, p. 16, ll. 18-21, “the longitudinally contracted and foreshortened topsheet will generally conform to the wearer, **while the larger radius of curvature of the absorbent core allows the core to fall away from the topsheet and create the void space thereinbetween**”. Additionally, Stevens at col. 7, ll. 48-49, “...because absorbent structure 22 is caused to form a cupped shape by tension of elastic members 56...” Further, Allen at col. 12, ll. 47-50, “**The void space 28 between the topsheet 12’ and the absorbent core 18’ is created by longitudinally contracting or foreshortening the topsheet 12’.**” Finally, Allen discloses that the absorbent core is joined to the backsheet not the topsheet; therefore the core is superimposed on the backsheet (col. 3, l. 65) and thus already spaced from the topsheet.

In light of the disclosures of Stevens and Allen and Applicant remarks on p. 16, ll. 18-21, Examiner maintains that the combination of outer cover of Stevens to provide a conforming fit would not frustrate the purpose of Allen because the inner layer contracted or foreshortened relative to the length and width of the outer layer creates the void space.

III. Applicant submits that adding the outer cover of Stevens to Allen would frustrate one of the purposes of Allen, i.e., creating a void space between the topsheet and the core and there would be no reasonable expectation of success because the stretchable outer cover of Stevens would not allow the core to fall away from the topsheet and create the void space discussed *supra*. Applicant remarks at page 16, lines 22-24 further submit that the outer cover of Stevens provides a conforming fit, and would frustrate the purpose of Allen by providing conforming fit in the presence of a void space and therefore there is no motivation to combine.

This argument is not persuasive because Allen discloses at column 7, ll. 17-19 that one of the purposes of Allen “provides for conforming to the shape of the wearer’s body” thus it is examiner’s position that the combination of references has motivation and reasonable expectation of success, therefore the rejection stands as stated above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Van Gompel (2005/0143710 A1) discloses an elastic inner layer defining an opening.

Van Gompel (2005/0148987 A1) discloses an elastic inner layer defining an opening.

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Although these references are pertinent prior art, neither was used to reject any claims in the first office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ginger T. Chapman whose telephone number is (571) 272-4934. The examiner can normally be reached on Monday through Friday 8:30 a.m. to 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on (571) 272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ginger Chapman
Examiner, Art Unit 3761
8/30/05



TATYANA ZALUKAEVA
PRIMARY EXAMINER

